Data Validation Checklist
Inorganic Analyses

Project:	35TH Avenue Superfund Site	Project No:	15268508.20000
Laboratory:	TestAmerica – Savannah, GA[1]	Job ID.:	680-85585-4
Method:	SW-846 6010C, 7471A, and 7196A	Associated Samples:	Refer to **Attachment A** (Sample Summary)
Matrix:	Soil	Samples Collected:	12/06/2012
Reviewer:	Nicole Lancaster	Date:	02/25/2013
Concurrence[2]:	Martha Meyers-Lee	Date:	03/01/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample preservation requirements met? If pH of aqueous sample >2 and was not adjusted by laboratory prior to analysis, J- flag positive results and R- flag non-detect results.			✓		
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil/sediment samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Have any technical holding times, determined from date of collection to date of analysis, been exceeded? (Hg: ≤28 days, other metals: ≤6 months; Cr+6: ≤24 hours from extraction). If not, then J- flag positive results and R- flag non-detect aqueous results.		✓			
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?		✓		The MDL (0.59 mg/Kg) for arsenic is greater than the Resident Soil RSL (0.39 mg/Kg). A RSL does not exist for total chromium; however, the total chromium MDL (0.5 mg/Kg) is greater than the hexavalent chromium Resident Soil RSL (0.29 mg/Kg).	
8. Were method blank (MB) prepared at the appropriate frequency (one per 20 samples, batch, matrix, and level)?	✓				
9. Was a calibration blank (ICB/CCB) analyzed at the beginning, after every 10th sample, and at the end of each analytical run?	✓				

[1] SW-846 7471A analysis subcontracted to TestAmerica of Tampa, FL
[2] Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
10. Were target analytes detected in the method and/or calibration blanks?	✓			Target analytes (i.e., As) were detected at concentrations below the reporting limit during the SW-846 6010C analysis of calibration blanks.	
11. Were target analytes reported in equipment/rinsate blanks analyses above the DL?		✓		According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank (120412-RB-Bowls + Spoons (680-85402-21)) was collected for the week of December 3, 2012. Target analytes were not detected during the EPA Methods 200.7 and 245.1 analyses of rinsate blank 120412-RB-Bowls + Spoons (680-85402-21), which was collected on 12/04/12 and results reported under Job 680-85402-3. The rinsate blank was not analyzed for hexavalent chromium.	
12. Were contaminants detected in samples below the blank contamination action level? o If blank result > RL, • Flag sample results ≤ RL with a U • Flag positive sample results > RL and ≤10x blank result , as J+ positive results o If blank result ≤RL, • Flag sample results ≤ RL with a U • Flag positive sample results > RL and ≤10x blank result , as J+ positive results		✓		Qualification of data due to the presence of calibration blank contamination is not warranted, as all blank results were significantly less than that detected in samples.	
13. Are there negative laboratory blank results with the absolute value ≤RL? If yes, then flag positive and non-detect sample results that are < 10x absolute blank value as J- and UJ, respectively.		✓			
14. Was a field duplicate analyzed?	✓			HP0061B-CSD (680-85585-45) is a field duplicate of HP0061B-CS (680-85585-44)	
15. Was precision deemed acceptable as defined by the project plans?	✓			Refer to **Attachment B** (Field Duplicate Evaluation)	
16. Were initial and continuing calibration standards analyzed at the lab/project-specified frequency for each instrument? o 6010C: • ICAL: Blank and one standard • ICV initially, and CCV every 10th sample and at the end of the analytical run • Lower Limit of Quantitation Check Sample (CRI) to be analyzed after establishing lower laboratory reporting limits	✓			• 6010C: 12/14/12, 12/18/12, and 12/20/12. One blank and one standard initially. ICV initially, and CCV every 10 samples and at end of run. CRI after initial calibration blank analysis. • 7471A: 12/14/12. 6-Point ICAL. ICV initially, CCV every 10 samples and at end of run. CRI after initial calibration blank analysis.	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
and as needed ○ 7471A: • ICAL: Blank and five standards • ICV initially, and CCV every 10th sample and at the end of the analytical run ○ 7196A: • ICAL: Blank and minimum of five standards • ICV initially, and CCV every 10th sample (15th per Method) and at the end of the analytical run				• 7196A: ○ 12/13/2012. 7-Point ICAL ○ 12/13/12. ICV initially, CCV every 10 samples and at end of run	
17. Were these results within lab/project specifications? ○ 6010C • ICV/CCV (Criteria: 90-110%R): ▪ If %R <75, then J- flag positive results and R-flag non-detects ▪ If 75-89%R, then J- flag positive results and UJ flag non-detects ▪ If 111-125%R, then J flag positive results ▪ If >125%R, then J+ flag positive results ▪ If >160%R, then R flag positive results • CRI (Method: 70-130%R, Laboratory: 50-150%R; Project: 50-150%R for Sb, Pb, and Tl, and 70-130%R for all other analytes): ▪ If CRI %R <50 (<30% for Sb, Pb, TL), then R flag results ≤ 2x RL and J flag positive results >2x RL ▪ If CRI %R 50-69% (30-49% for Sb, Pb, TL), then J- and UJ flag positive results <2x RL and ND, respectively ▪ If CRI %R >130% and ≤180% (>150%, but ≤200% for Sb, Pb, TL), then J+ flag positive results <2x RL ▪ If CRI %R >180% (>200% for Sb, Pb, TL), then R flag positive results ○ 7471A • ICV/CCV (Criteria: 80-120%R): ▪ If correlation coefficients <0.995, then J and UJ flag positive and non-detect results. ▪ If %R <65, then J- flag positive results and R-flag non-detects ▪ If 65-79%R, then J- flag positive results and UJ flag non-detects ▪ If 121-135%R, then J flag positive results ▪ If >135%R, then J+ flag positive results ▪ If >170%R, then R flag positive results • CRI (Method: Not required, Laboratory: 50-150%R, Project: 70-130%R):	✓			• Mercury correlation coefficients (raw data): ICAL of 12/14/12, 0.99997 (pages 1185) • Hexavalent chromium correlation coefficient (raw data): ICAL of 12/13/12, 0.999978 (page 1224)	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
▪ If CRI %R <50, then R flag results ≤ 2x RL and J flag positive results >2x RL ▪ If CRI %R 50-69%, then J- and UJ flag positive results <2x RL and ND, respectively ▪ If CRI %R >130% and ≤180%, then J+ flag positive results <2x RL ▪ If CRI %R >180%, then R flag positive result o 7196A: • ICV/CCV (Criteria: 90-110%R): ▪ If correlation coefficients <0.995, then J and UJ flag positive and non-detect results. ▪ If %R <65, then J- flag positive results and R-flag non-detects ▪ If 65-90%R, then J- flag positive results and UJ flag non-detects ▪ If 110-135%R, then J flag positive results ▪ If >135%R, then J+ flag positive results ▪ If >170%R, then R flag positive results					
18. Was the interference check sample (ICS) analyzed at the beginning of each ICP analytical run?	✓				
19. Are ICS recoveries within 80-120% of the true value? If not, qualify data as follows when native Al, Fe, Ca, and Mg sample concentrations are equal to or greater than the ICS spiking level: o If >120%R (or >true value plus 2x CRQL), J+ flag positive results o If 50-79%R (or less than true value – 2x the CRQL), J- flag positive results and UJ flag non-detects o If <50%R, J- flag positive results and R-flag non-detects	✓				
20. Was a LCS analyzed for each preparation batch (one per 20 samples per matrix and level)?	✓				
21. Did LCS recoveries meet method/laboratory/project (80-120%R) specifications? o Soil: • LCS result > Upper control limit (UCL): J+ flag positive results • LCS result < Lower control limit (LCL): J- flag positive results and UJ flag non-detects o Aqueous: • If <50%R, then J- and R flag positive and ND results, respectively • If 50-LCL%R, J- and UJ flag positive and ND results,	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
respectively • >UCL: J+ Flag positive results • >150%R: R Flag results					
22. Was the RPD between LCS and LCSD results within method/laboratory /project control limits (≤20%RPD)? If not, J and UJ flag positive and non-detect results, respectively			✓	LCS Only	
23. Was a Matrix Spike (MS) and Matrix Spike Duplicate (MSD) analyzed once per preparation batch?	✓				
24. Is the MS and MSD parent sample a project-specific sample?	✓	✓		• 6010C: o Prep Batch 132491: 680-85585-36 (HP0070 (special sample)), MS/MSD o Prep Batch 259365: 680-85585-16 (HP0196-CS), MS/MSD o Prep Batch 259448: 680-85585-53 (HP0054B-CS (sieved)), MS/MSD • 7471A, Prep Batch 132512: o 680-85475-37 (Batch sample), MS/MSD. . Lab sample 680-85475-37 is a project-specific sample (CV0707B-CS-SP) that was selected by TestAmerica for the mercury QC analysis, and native sample results were reported under Job ID 680-85475-4. o 680-85585-16 (HP0196-CS), MS/MSD o 680-85585-36 (HP0070 (special sample)), MS/MSD • 7196A, Prep Batch 259389: 680-85585-16 (HP0196-CS), MS	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
25. Was a post-digestion spike (PDS) analysis conducted when MS and/or MSD results did not meet control limits (Note: PDS is not required for silver, mercury, or hexavalent chromium)?	✓			• 6010C: o 680-85534-18 (Batch sample). Lab sample 680-85534-18 is a project-specific sample (FM0165A-CS) that was selected by TestAmerica for the metals PDS analysis, and the native sample results were reported under Job ID 680-85534-5. o 680-85585-53 (HP0054B-CS (sieved)) o 680-85731-2 (Batch sample). Lab sample 680-85731-2 is a project-specific sample (HP0124B-CS) that was selected by TestAmerica for the metals PDS analysis, and the native sample results were reported under Job ID 680-85731-4. • 7196A: 680-85585-16 (HP0196-CS)	
26. For all analytes with sample concentration < 4 x spike concentration, are spike recoveries within method (6010C: 75-125%R MS/MSD and 80-120%R PDS; 7471A: 80-120%R MS/MSD; 7196A: 85-115%R MS), laboratory (MS, MSD, and PDS: 75-125%R for 6010C/7471 (as applicable) and 80-120%R for 7196), and project (as noted below) specifications? *Only QC results for project samples are evaluated.* If not, o 6010C: • If MS %R <30 and PDS %R <75, then J- and R Flag positive and ND results, respectively • If MS %R <30 and PDS %R >75, then J flag positive and UJ flag non-detect results • If MS and MSD %R 30-74 and PDS%R <75, then J- flag positive and UJ flag non-detect results • If MS and MSD %R 30-74 and PDS%R ≥75, then J flag positive and UJ flag non-detect results • If MS, MSD, and PDS %R >125, J+ flag positive results • If MS and MSD %R >125 and PDS %R ≤125, then J flag positive results • If MS and MSD %R <30 and no PDS, then J- flag positive and R-flag non-detect results • If MS and MSD %R 30-74 and no PDS, then J- and UJ flag positive and non-detect results, respectively • If MS and MSD %R >125 and no PDS, then J+ flag positive results		✓		• HP0196-CS (680-85585-16): o 6010C: ▪ Arsenic @ 56 and 43%R (75-125). PDS analysis not conducted. J-flag, because a low recovery is indicative of a negative bias. ▪ Barium @ 470 and 912%R (75-125). PDS analysis not conducted. Sample concentration >4 x MS/MSD spike concentration; therefore, qualification of data is not warranted. ▪ Cadmium @ 136 and 102%R (75-125). PDS analysis not conducted. Qualification of data is not warranted, because the MSD met laboratory control limits. ▪ Chromium @ 398 and 326%R (75-125). PDS analysis not conducted. Sample concentration >4 x MS/MSD spike concentration; therefore, qualification of data is not warranted. ▪ Lead @ 2956 and 631%R (75-125). PDS analysis not conducted. Sample concentration >4 x MS/MSD spike concentration; therefore, qualification of data is not warranted. ▪ Silver @ 159 and 146%R (75-125). PDS analysis not conducted. J-flag, because a high recovery is indicative of a positive bias. o 7471A: Mercury @-119 and -641%R (80-120). Sample concentration >4 x spike concentration; therefore, qualification of data is not warranted.	J

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
○ 7471A/7196: • If MS %R <30, then J- and R Flag positive and ND results, respectively • If MS and MSD %R 30-LCL, then J- flag positive and UJ flag non-detect results • If MS and MSD %R >UCL, then J+ flag positive results				○ 7196A: Hexavalent Chromium @122%R (80-120). PDS recovery met control limits. Qualification of data is not warranted, because the sample result is non-detect and a high recovery is indicative of a positive bias. • HP0070 (special sample) (680-85585-36): ○ 6010C ▪ Barium @ 127 and 268%R (75-125). PDS analysis not conducted. Sample concentration >4 x MS/MSD spike concentration; therefore, qualification of data is not warranted. ▪ Cadmium @ 26 and 47%R. PDS analysis not conducted. J-flag, because a low recovery is indicative of a negative bias. ▪ Chromium @ 121 and 190%R (75-125). PDS analysis not conducted. Qualification of data is not warranted, because the MS met laboratory control limits. ▪ Lead @ 1279 and 39852%R (75-125). PDS analysis not conducted. Sample concentration >4 x MS/MSD spike concentration; therefore, qualification of data is not warranted. ○ 7471A: Mercury @ 35 and 281%R (80-120). J-flag, MS and MSD recoveries did not meet laboratory control limits. • HP0054B- CS (sieved) (680-85585-53), 6010C: ▪ Arsenic @ 57 and 115%R. PDS recovery met control limits. Qualification of data is not warranted, because the MSD met laboratory control limits. ▪ Barium @ 27 and 276%R (75-125). PDS recovery met control limits. Sample concentration >4 x spike concentration; therefore, qualification of data is not warranted. ▪ Chromium @ 83 and 161%R (75-125). PDS recovery met control limits. Sample concentration >4 x spike concentration; therefore, qualification of data is not warranted. ▪ Lead @ 62 and 246%R (75-125). PDS recovery met control limits. Sample concentration >4 x spike concentration; therefore, qualification of data is not warranted.	
27. Were laboratory/project (≤20%RPD) criteria met for precision		✓		• HP0196-CS (680-85585-16), 7471A: Mercury	J

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
during the MS and MSD analysis? *Only QC results for project samples are evaluated.* ○ If RPD >20%, J and UJ flag positive and non-detect results.				@ 63%RPD (≤20). Sample concentration >4 x spike concentration; therefore, qualification of data is not warranted. • HP0070 (special sample) (680-85585-36): ○ 6010C ▪ Chromium @ 24%RPD (≤20). J-flag ▪ Lead @ 112%RPD (≤20). Sample concentration >4 x spike concentration; therefore, qualification of data is not warranted. ○ 7471A: Mercury @73%RPD (≤20). J-flag.	
28. Was a serial dilution conducted for 6010C/EPA 200.7?	✓			• 6010C: ○ 680-85585-53 (HP0054B-CS (sieved)) ○ 680-85534-18 (Batch sample). Lab sample 680-85534-18 is a project-specific sample (FM0165A-CS) that was selected by TestAmerica for the metals serial dilution analysis, and the native sample results were reported under Job ID 680-85534-5. ○ 680-85731-2 (Batch). Lab sample 680-85731-2 is a project-specific sample (HP0124B-CS) that was selected by TestAmerica for the metals serial dilution analysis, and the native sample results were reported under Job ID 680-85731-4. • 7471A: ○ 680-85585-53 (HP0054B-CS (sieved)) ○ 680-85475-37 (Batch sample). Lab sample 680-85475-37 is a project-specific sample (CV0707B-CS-SP) that was selected by TestAmerica for the mercury QC analysis, and native sample results were reported under Job ID 680-85475-4.	
29. Is the serial dilution parent sample a project-specific sample?	✓	✓			
30. Is the percent difference between the serially diluted result and undiluted result less 10% (for those analytes with native concentrations greater than 50x the DL)? *Only QC results for project samples are evaluated.* ○ If %D >10, J and UJ flag positive and non-detect results,	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
respectively.					
31. Was a laboratory duplicate analyzed?	✓			7196A: 680-85585-16 (HP0196-CS)	
32. Was the lab duplicate analysis conducted on a project-specific sample?	✓				
33. Were criteria for laboratory/project precision met? *Only QC results for project samples are evaluated.* o If RPD values >20% (35% for soil/sediment) or absolute difference > RL (2x RL for soil/sediment), then J and UJ flag positive and non-detect results, respectively			✓	An evaluation of precision is not possible based on the results, as hexavalent chromium was not detected in sample HP0196-CS.	
34. Were lab comments included in report? If yes, summarize contents or attach a copy of the narrative.	✓			Refer to **Attachment C** (Case Narrative)	

Comments: The data validation was conducted in accordance with the *Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1* (OTIE, October 2012). The data review process was modeled after the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Inorganic Data Review* (EPA 540-R-04-004, October 2004). Sample results have been qualified based on the results of the data review process (**Attachment D**). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment

DV Flag Definitions:

J- The result is an estimated quantity, but the result may be biased low.
J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+ The result is an estimated quantity, but the result may be biased high.
R The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
UJ The analyte was analyzed for, but was not detected. The reported limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A

SAMPLE SUMMARY

COVER PAGE
METALS

Lab Name: TestAmerica Savannah Job Number: 680-85585-4

SDG No.: 68085585-3

Project: 35th Avenue Superfund Site

Client Sample ID	Lab Sample ID
FM0165NN-GS	680-85585-12
HP0196A-CS-SP	680-85585-16
HP0108B-CS-SP	680-85585-18
HP0070A-CS-SP	680-85585-22
HP0070 (special sample)	680-85585-36
HP0054B-CS	680-85585-42
HP0061B-CS	680-85585-44
HP0061B-CS-D	680-85585-45
FM0165NN-GS (sieved)	680-85585-49
HP0196A-CS-SP (sieved)	680-85585-50
HP0108B-CS-SP (sieved)	680-85585-51
HP0070A-CS (sieved)	680-85585-52
HP0054B-CS (sieved)	680-85585-53
HP0061B-CS (sieved)	680-85585-54

Comments:

ATTACHMENT B

FIELD DUPLICATE EVALUATION

Evaluation of Field Duplicate Results **Attachment B**

Analyte	HP0061B-CS 680-85585-44	RL	HP0061B-CSD 680-85585-45	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
Arsenic	28	2.5	26	2.6	mg/kg	12.75	**7**	NA	NA	None, RPD ≤ 50%
Barium	540	1.3	410	1.3	mg/kg	6.5	**27**	NA	NA	None, RPD ≤ 50%
Cadmium	1.4	0.63	1.5	0.64	mg/kg	3.175	NA	**0.1**	**1.27**	None, absolute difference ≤ 2x Avg RL
Chromium	57	1.3	67	1.3	mg/kg	6.5	**16**	NA	NA	None, RPD ≤ 50%
Lead	610	1.3	630	1.3	mg/kg	6.5	**3**	NA	NA	None, RPD ≤ 50%
Selenium	4.7	3.1	3.5	3.2	mg/kg	15.75	NA	**1.2**	**6.3**	None, absolute difference ≤ 2x Avg RL
Mercury	0.18	1.3	0.14	1.3	mg/kg	6.5	NA	**0.04**	**2.6**	None, absolute difference ≤ 2x Avg RL

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram
NA - Not applicable
RL - Reporting limit
RPD - Relative percent difference

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C

CASE NARRATIVE

CASE NARRATIVE
Client: Oneida Total Integrated Enterprises LLC
Project: 35th Avenue Superfund Site
Report Number: 680-85585-4

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 12/8/2012 9:17 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.6º C and 0.8º C.

SEMIVOLATILE ORGANIC COMPOUNDS (SOLID)

Sample HP0070 (special sample) (680-85585-36) was analyzed for Semivolatile Organic Compounds (Solid) in accordance with EPA SW-846 Method 8270D.

Method(s) 8270D: The initial calibration curve analyzed in batch 260483 was outside method criteria for the following analytes: benzaldehyde and atrazine. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analytes is considered an estimated concentration.

Method(s) 8270D: The following analytes have been identified, in the reference method and/or via historical data, to be poor and/or erratic performers: Famphur, 1,4-Napthaquinone, Methane sulfonate, Benzaldehyde, 1-naphthylamine, 2-naphthylamine, p-Dimethylamino azobenzene, p-phenylenediamine, a,a-dimethylphenethylamine, Methapyriline, 2-picoline (2-methylpyridine), 3,3'-dimethylbenzidine, 3,3'-dichlorobenzidine, Benzidine, Benzaldehyde, Benzoic acid, Dinoseb, Hexachlorophene, Hexachlorocyclopentadiene, o,o,o-triethylphosphoro-thioate. These analytes may have a %D>60% if the average %D of all the analytes in the initial calibration verification (ICV) is 30%.

Method(s) 8270D: The following sample was diluted due to the abundance of target analytes: HP0070 (special sample) (680-85585-36). As such, surrogate recoveries are not reported, and elevated reporting limits (RLs) are provided.

PCBS

Samples FM0165CC-CS (680-85585-1), FM0165DD-CS (680-85585-2), FM0165EE-CS (680-85585-3), FM0165FF-CS (680-85585-4), FM0165GG-CS (680-85585-5) and HP0070 (special sample) (680-85585-36) were analyzed for PCBs in accordance with EPA SW-846 Method 8081B_8082A.

This method incorporates 2nd column confirmation. Corrective action is not taken for surrogate/spike compounds unless results from both columns are unacceptable. Results outside criteria are qualified.

Method(s) 8081B/8082A: Internal standard (ISTD) response for the following sample(s) exceeded the control limit on Column one: FM0165CC-CS (680-85585-1 MS), FM0165FF-CS (680-85585-4). As such, the sample results associated with this ISTD were reported from the other column, which met ISTD acceptance criteria.

Method(s) 8081B/8082A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 259820 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8081B/8082A: Surrogate recovery for the following sample(s) was outside control limits: HP0070 (special sample) (680-85585-36). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

METALS (ICP)

Samples FM0165NN-GS (680-85585-12), HP0196A-CS-SP (680-85585-16), HP0108B-CS-SP (680-85585-18), HP0070A-CS-SP (680-85585-22), HP0070 (special sample) (680-85585-36), HP0054B-CS (680-85585-42), HP0061B-CS (680-85585-44), HP0061B-CS-D (680-85585-45), FM0165NN-GS (sieved) (680-85585-49), HP0196A-CS-SP (sieved) (680-85585-50), HP0108B-CS-SP (sieved) (680-85585-51), HP0070A-CS (sieved) (680-85585-52), HP0054B-CS (sieved) (680-85585-53) and HP0061B-CS (sieved) (680-85585-54) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C.

Method(s) 6010C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and/or precision for several analytes were outside control limits. Refer to QC pages for details.

Method(s) 6010C: Due to the high concentration of barium, chromium, and lead, the matrix spike / matrix spike duplicate (MS/MSD) for batch 680-259365 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 6010C: Due to the high concentration of barium, chromium, and lead, the matrix spike / matrix spike duplicate (MS/MSD) for batch 680-259448 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 6010C: Due to the high concentration of barium and lead, the matrix spike / matrix spike duplicate (MS/MSD) for batch 680-259807 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

TOTAL MERCURY

Samples FM0165NN-GS (680-85585-12), HP0196A-CS-SP (680-85585-16), HP0108B-CS-SP (680-85585-18), HP0070A-CS-SP (680-85585-22), HP0070 (special sample) (680-85585-36), HP0054B-CS (680-85585-42), HP0061B-CS (680-85585-44), HP0061B-CS-D (680-85585-45), FM0165NN-GS (sieved) (680-85585-49), HP0196A-CS-SP (sieved) (680-85585-50), HP0108B-CS-SP (sieved) (680-85585-51), HP0070A-CS (sieved) (680-85585-52), HP0054B-CS (sieved) (680-85585-53) and HP0061B-CS (sieved) (680-85585-54) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A.

Method(s) 7471A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for mercury in batch 132491 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. Analytical batch # 132537. HP0070 (special sample) (680-85585-36 MS), HP0070 (special sample) (680-85585-36 MSD).

Method(s) 7471A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for mercury in batch 13249 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. Analytical batch # 132537. HP0196A-CS-SP (680-85585-16 MS), HP0196A-CS-SP (680-85585-16 MSD).

HEXAVALENT CHROMIUM

Samples HP0196A-CS-SP (680-85585-16) and HP0054B-CS (680-85585-42) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 3060A/7196A.

Method(s) 7196A: The matrix spike (MS) recoveries for batch 259749 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

ATTACHMENT D

QUALIFIED SAMPLE RESULTS

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FM0165NN-GS
Lab Sample ID: 680-85585-12
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 11:31
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 90.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	9.2	2.1	0.61	mg/Kg			1	6010C
7440-39-3	Barium	35	1.0	0.31	mg/Kg			1	6010C
7440-43-9	Cadmium	0.52	0.52	0.10	mg/Kg	U		1	6010C
7440-47-3	Chromium	27	1.0	0.52	mg/Kg			1	6010C
7439-92-1	Lead	13	1.0	0.55	mg/Kg			1	6010C
7782-49-2	Selenium	2.6	2.6	1.0	mg/Kg	U		1	6010C
7440-22-4	Silver	1.0	1.0	0.099	mg/Kg	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0196A-CS-SP
Lab Sample ID: 680-85585-16
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 09:13
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 74.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	40	2.6	0.75	mg/Kg		J	1	6010C
7440-39-3	Barium	430	1.3	0.38	mg/Kg			1	6010C
7440-43-9	Cadmium	7.6	0.64	0.13	mg/Kg			1	6010C
7440-47-3	Chromium	360	1.3	0.64	mg/Kg			1	6010C
7439-92-1	Lead	710	1.3	0.68	mg/Kg			1	6010C
7782-49-2	Selenium	3.6	3.2	1.3	mg/Kg			1	6010C
7440-22-4	Silver	20	1.3	0.12	mg/Kg		J	1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0108B-CS-SP
Lab Sample ID: 680-85585-18
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 10:50
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 80.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	40	2.5	0.73	mg/Kg			1	6010C
7440-39-3	Barium	370	1.2	0.37	mg/Kg			1	6010C
7440-43-9	Cadmium	3.3	0.62	0.12	mg/Kg			1	6010C
7440-47-3	Chromium	77	1.2	0.62	mg/Kg			1	6010C
7439-92-1	Lead	290	1.2	0.66	mg/Kg			1	6010C
7782-49-2	Selenium	3.7	3.1	1.2	mg/Kg			1	6010C
7440-22-4	Silver	0.94	1.2	0.12	mg/Kg	J		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0070A-CS-SP
Lab Sample ID: 680-85585-22
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 10:40
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 76.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	23	2.4	0.70	mg/Kg			1	6010C
7440-39-3	Barium	180	1.2	0.36	mg/Kg			1	6010C
7440-43-9	Cadmium	1.2	0.59	0.12	mg/Kg			1	6010C
7440-47-3	Chromium	46	1.2	0.59	mg/Kg			1	6010C
7439-92-1	Lead	140	1.2	0.63	mg/Kg			1	6010C
7782-49-2	Selenium	2.2	3.0	1.2	mg/Kg	J		1	6010C
7440-22-4	Silver	0.15	1.2	0.11	mg/Kg	J		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0070 (special sample)
Lab Sample ID: 680-85585-36
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 11:00
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 77.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	3.4	2.4	0.71	mg/Kg			1	6010C
7440-39-3	Barium	98	1.2	0.36	mg/Kg			1	6010C
7440-43-9	Cadmium	8.3	0.60	0.12	mg/Kg		J	1	6010C
7440-47-3	Chromium	20	1.2	0.60	mg/Kg		J	1	6010C
7439-92-1	Lead	880	12	6.4	mg/Kg			10	6010C
7782-49-2	Selenium	1.6	3.0	1.2	mg/Kg	J		1	6010C
7440-22-4	Silver	2.6	1.2	0.12	mg/Kg			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0054B-CS
Lab Sample ID: 680-85585-42
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/07/2012 09:30
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 86.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	46	2.1	0.61	mg/Kg			1	6010C
7440-39-3	Barium	440	1.0	0.31	mg/Kg			1	6010C
7440-43-9	Cadmium	0.85	0.51	0.10	mg/Kg			1	6010C
7440-47-3	Chromium	68	1.0	0.51	mg/Kg			1	6010C
7439-92-1	Lead	74	1.0	0.55	mg/Kg			1	6010C
7782-49-2	Selenium	3.8	2.6	1.0	mg/Kg			1	6010C
7440-22-4	Silver	1.0	1.0	0.099	mg/Kg	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0061B-CS
Lab Sample ID: 680-85585-44
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/07/2012 09:45
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 75.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	28	2.5	0.74	mg/Kg			1	6010C
7440-39-3	Barium	540	1.3	0.38	mg/Kg			1	6010C
7440-43-9	Cadmium	1.4	0.63	0.13	mg/Kg			1	6010C
7440-47-3	Chromium	57	1.3	0.63	mg/Kg			1	6010C
7439-92-1	Lead	610	1.3	0.67	mg/Kg			1	6010C
7782-49-2	Selenium	4.7	3.1	1.3	mg/Kg			1	6010C
7440-22-4	Silver	1.3	1.3	0.12	mg/Kg	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0061B-CS-D
Lab Sample ID: 680-85585-45
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/07/2012 09:50
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 77.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	26	2.6	0.76	mg/Kg			1	6010C
7440-39-3	Barium	410	1.3	0.39	mg/Kg			1	6010C
7440-43-9	Cadmium	1.5	0.64	0.13	mg/Kg			1	6010C
7440-47-3	Chromium	67	1.3	0.64	mg/Kg			1	6010C
7439-92-1	Lead	630	1.3	0.68	mg/Kg			1	6010C
7782-49-2	Selenium	3.5	3.2	1.3	mg/Kg			1	6010C
7440-22-4	Silver	1.3	1.3	0.12	mg/Kg	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FM0165NN-GS (sieved) Lab Sample ID: 680-85585-49

Lab Name: TestAmerica Savannah Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/06/2012 11:31

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 90.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	7.7	2.2	0.65	mg/Kg			1	6010C
7440-39-3	Barium	36	1.1	0.33	mg/Kg			1	6010C
7440-43-9	Cadmium	0.55	0.55	0.11	mg/Kg	U		1	6010C
7440-47-3	Chromium	16	1.1	0.55	mg/Kg			1	6010C
7439-92-1	Lead	12	1.1	0.59	mg/Kg			1	6010C
7782-49-2	Selenium	1.4	2.8	1.1	mg/Kg	J		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0196A-CS-SP (sieved) Lab Sample ID: 680-85585-50

Lab Name: TestAmerica Savannah Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/06/2012 09:13

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 74.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	27	2.7	0.79	mg/Kg			1	6010C
7440-39-3	Barium	550	1.3	0.40	mg/Kg			1	6010C
7440-43-9	Cadmium	11	0.67	0.13	mg/Kg			1	6010C
7440-47-3	Chromium	440	1.3	0.67	mg/Kg			1	6010C
7439-92-1	Lead	860	1.3	0.71	mg/Kg			1	6010C
7782-49-2	Selenium	5.3	3.3	1.3	mg/Kg			1	6010C
7440-22-4	Silver	27	1.3	0.13	mg/Kg			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0108B-CS-SP (sieved) Lab Sample ID: 680-85585-51

Lab Name: TestAmerica Savannah Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/06/2012 10:50

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 78.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	43	2.3	0.68	mg/Kg			1	6010C
7440-39-3	Barium	470	1.2	0.35	mg/Kg			1	6010C
7440-43-9	Cadmium	6.2	0.58	0.12	mg/Kg			1	6010C
7440-47-3	Chromium	93	1.2	0.58	mg/Kg			1	6010C
7439-92-1	Lead	520	1.2	0.61	mg/Kg			1	6010C
7782-49-2	Selenium	3.3	2.9	1.2	mg/Kg			1	6010C
7440-22-4	Silver	0.43	1.2	0.11	mg/Kg	J		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0070A-CS (sieved) Lab Sample ID: 680-85585-52

Lab Name: TestAmerica Savannah Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/06/2012 10:40

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 74.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	27	2.4	0.71	mg/Kg			1	6010C
7440-39-3	Barium	120	1.2	0.36	mg/Kg			1	6010C
7440-43-9	Cadmium	1.0	0.60	0.12	mg/Kg			1	6010C
7440-47-3	Chromium	83	1.2	0.60	mg/Kg			1	6010C
7439-92-1	Lead	150	1.2	0.64	mg/Kg			1	6010C
7782-49-2	Selenium	1.7	3.0	1.2	mg/Kg	J		1	6010C
7440-22-4	Silver	0.20	1.2	0.12	mg/Kg	J		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0054B-CS (sieved) Lab Sample ID: 680-85585-53

Lab Name: TestAmerica Savannah Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/07/2012 09:30

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 80.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	32	2.4	0.71	mg/Kg			1	6010C
7440-39-3	Barium	170	1.2	0.36	mg/Kg			1	6010C
7440-43-9	Cadmium	0.45	0.60	0.12	mg/Kg	J		1	6010C
7440-47-3	Chromium	55	1.2	0.60	mg/Kg			1	6010C
7439-92-1	Lead	66	1.2	0.64	mg/Kg			1	6010C
7782-49-2	Selenium	1.9	3.0	1.2	mg/Kg	J		1	6010C
7440-22-4	Silver	1.2	1.2	0.12	mg/Kg	U		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0061B-CS (sieved) Lab Sample ID: 680-85585-54

Lab Name: TestAmerica Savannah Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/07/2012 09:45

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 74.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	24	2.5	0.73	mg/Kg			1	6010C
7440-39-3	Barium	320	1.2	0.37	mg/Kg			1	6010C
7440-43-9	Cadmium	1.2	0.62	0.12	mg/Kg			1	6010C
7440-47-3	Chromium	64	1.2	0.62	mg/Kg			1	6010C
7439-92-1	Lead	660	1.2	0.66	mg/Kg			1	6010C
7782-49-2	Selenium	3.6	3.1	1.2	mg/Kg			1	6010C
7440-22-4	Silver	1.2	1.2	0.12	mg/Kg	U		1	6010C

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FM0165NN-GS
Lab Sample ID: 680-85585-12
Lab Name: TestAmerica Tampa
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 11:31
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 90.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.029	0.029	0.012	mg/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0196A-CS-SP
Lab Sample ID: 680-85585-16
Lab Name: TestAmerica Tampa
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 09:13
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 74.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	2.6	0.078	0.031	mg/Kg			2	7471A

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0108B-CS-SP
Lab Sample ID: 680-85585-18
Lab Name: TestAmerica Tampa
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 10:50
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 80.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.23	0.032	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0070A-CS-SP
Lab Sample ID: 680-85585-22
Lab Name: TestAmerica Tampa
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 10:40
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 76.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.12	0.036	0.014	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0070 (special sample)
Lab Sample ID: 680-85585-36
Lab Name: TestAmerica Tampa
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 11:00
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 77.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.36	0.040	0.016	mg/Kg		J	1	7471A

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE,,October 2012)

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0054B-CS
Lab Sample ID: 680-85585-42
Lab Name: TestAmerica Tampa
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/07/2012 09:30
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 86.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.068	0.034	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0061B-CS
Lab Sample ID: 680-85585-44
Lab Name: TestAmerica Tampa
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/07/2012 09:45
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 75.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.18	0.038	0.015	mg/Kg			1	7471A

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0061B-CS-D
Lab Sample ID: 680-85585-45
Lab Name: TestAmerica Tampa
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/07/2012 09:50
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 77.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.14	0.032	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FM0165NN-GS (sieved) Lab Sample ID: 680-85585-49

Lab Name: TestAmerica Tampa Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/06/2012 11:31

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 90.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.033	0.033	0.013	mg/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0196A-CS-SP (sieved) Lab Sample ID: 680-85585-50

Lab Name: TestAmerica Tampa Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/06/2012 09:13

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 74.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	1.8	0.20	0.078	mg/Kg			5	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0108B-CS-SP (sieved) Lab Sample ID: 680-85585-51

Lab Name: TestAmerica Tampa Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/06/2012 10:50

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 78.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.21	0.036	0.014	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0070A-CS (sieved) Lab Sample ID: 680-85585-52

Lab Name: TestAmerica Tampa Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/06/2012 10:40

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 74.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.12	0.034	0.014	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0054B-CS (sieved) Lab Sample ID: 680-85585-53

Lab Name: TestAmerica Tampa Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/07/2012 09:30

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 80.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.065	0.034	0.014	mg/Kg			1	7471A

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HP0061B-CS (sieved) Lab Sample ID: 680-85585-54

Lab Name: TestAmerica Tampa Job No.: 680-85585-4

SDG ID.: 68085585-3

Matrix: Solid Date Sampled: 12/07/2012 09:45

Reporting Basis: DRY Date Received: 12/08/2012 09:17

% Solids: 74.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.17	0.040	0.016	mg/Kg			1	7471A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HP0196A-CS-SP
Lab Sample ID: 680-85585-16
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/06/2012 09:13
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 74.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
18540-29-9	Chromium, hexavalent	130	130	40	mg/Kg	U		100	7196A

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HP0054B-CS
Lab Sample ID: 680-85585-42
Lab Name: TestAmerica Savannah
Job No.: 680-85585-4
SDG ID.: 68085585-3
Matrix: Solid
Date Sampled: 12/07/2012 09:30
Reporting Basis: DRY
Date Received: 12/08/2012 09:17
% Solids: 86.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
18540-29-9	Chromium, hexavalent	1.2	1.2	0.35	mg/Kg	U		1	7196A